



Complete Summary

TITLE

Hypertension: percent of eligible patients with an active diagnosis of hypertension whose most recent blood pressure recording was less than 140/90 mm Hg.

SOURCE(S)

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percent of eligible patients with an active diagnosis of hypertension whose most recent blood pressure recording was less than 140/90 mm Hg.

RATIONALE

High blood pressure affects about 50 million Americans and 1 billion people worldwide. According to recent estimates, one in four U.S. adults has high blood pressure, but because there are no symptoms, nearly one-third of these people don't know they have it. This is why high blood pressure is often called "the silent killer." Uncontrolled high blood pressure can lead to stroke, heart attack, heart failure or kidney failure. The only way to tell if you have high blood pressure is to have your blood pressure checked.

The National High Blood Pressure Education Program Coordinating Committee recently issued the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC VII). According to the report, new recommendations for tighter control of high blood pressure may drastically reduce the number of individuals who die each year from hypertension-related illnesses. The report further states that the relationship between blood pressure and risk of cardiovascular disease events is continuous, consistent, and independent of other risk factors. The higher the blood pressure becomes, the greater the chance of heart attack, heart failure, stroke, and kidney disease. The guidelines highlight 4 basic strategies: Pay attention to blood pressure before it is high; In people over age 50, systolic pressure is more important than diastolic; Two (or more) drugs are better than one for most patients; and Build trusting clinician/patient relationships that motivate patients to be healthy.

PRIMARY CLINICAL COMPONENT

Hypertension; blood pressure recording

DENOMINATOR DESCRIPTION

Patients from the NEXUS Clinics cohort with a diagnosis of hypertension (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients with an active diagnosis of hypertension whose most recent blood pressure recording was less than 140/90 mm Hg (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [VA/DoD clinical practice guideline for the management of dyslipidemia.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

External oversight/Veterans Health Administration
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 to 85 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

See the "Rationale" field.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See the "Rationale" field.

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients from the NEXUS Clinics cohort*

*Refer to the original measure documentation for patient cohort description.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients from the NEXUS Clinics cohort with a diagnosis of hypertension sampled*

Eligible hypertension patient:* Meets Nexus Clinic selection criteria (refer to the original measure documentation for patient cohort description and sampling size strategy) **and primary or secondary diagnosis of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code 401.0 (malignant hypertension), 401.1 (benign hypertension), or 401.9 (unspecified). A Medical Doctor (MD), Doctor of Osteopathy (DO), Nurse Practitioner (NP), Physician Assistant (PA), or Clinical

Nurse Specialist (CNS) must record hypertension as the patient's diagnosis. A diagnosis of 'borderline hypertension' is hypertension if it is coded as hypertension and is being treated by recommended weight loss and/or recommended increase in physical activity, and/or prescription for medication such as a diuretic, beta-blocker, angiotensin-converting enzyme (ACE), angiotensin receptor blocker (ARB), or calcium channel blocker.

Exclusions

The ICD-9-CM codes above do not include pulmonary hypertension, that involving vessels of the brain and eye, or elevated blood pressure (BP).

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients with an active diagnosis of hypertension whose most recent blood pressure (BP) recording was less than 140/90*

***Note:**

- *Active diagnosis:* The condition was ever diagnosed and there is no subsequent statement prior to the most recent outpatient visit indicating the condition was resolved or is inactive.
- *BP less than 140/90:* Most recent Veterans Health Administration (VHA) outpatient encounter (exclude Emergency Department [ED], Urgent Care, and Ambulatory Surgery encounters, and inpatient admission) prior to the study interval.
- If the only blood pressure recorded during the past year was in the ED/Urgent Care/inpatient care, the scoring will be "not done" (since ED/Urgent Care/inpatient encounters are not considered in searching for BP results).
- If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP (i.e., 148/82 and 138/92 use 138/82).

Exclusions

- If no BP was recorded during the past year, the result is assumed to be out of control. Patient is included in the denominator (counts against the facility).
- Do not use BP reading from outpatient visits which were for the sole purpose of having a diagnostic test or surgical procedure performed (i.e., sigmoidoscopy or removal of a mole).

- Do not include BP readings obtained the same day as a major diagnostic or surgical procedure (i.e., stress test, IV contrast, endoscopy)

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

HTN - outpatient diagnosis hypertension and BP less than 140/90.

MEASURE COLLECTION

[Fiscal Year \(FY\) 2009: Veterans Health Administration \(VHA\) Performance Measurement System](#)

MEASURE SET NAME

[Performance Measures](#)

MEASURE SUBSET NAME

[Effectiveness of Care -- Cardiovascular](#)

DEVELOPER

Veterans Health Administration

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Unspecified

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Unspecified

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2001 Nov

REVISION DATE

2009 Jan

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Office of Quality and Performance (10Q). FY 2008, Q1 technical manual for the VHA performance measurement system. Washington (DC): Washington (DC); 2007 Oct 31. 315 p.

SOURCE(S)

Office of Quality Performance. FY 2009, Q2 technical manual for the VHA performance measurement system. Washington (DC): Veterans Health Administration; 2009 Jan 5. various p.

MEASURE AVAILABILITY

The individual measure, "HTN - Outpatient Diagnosis Hypertension and BP Less Than 140/90," is published in "FY 2009, Q2 Technical Manual for the VHA Performance Measurement System."

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NQMC STATUS

This NQMC summary was completed by ECRI on September 27, 2002. The information was verified by the Veterans Health Administration on October 29, 2002. This NQMC summary was updated by ECRI Institute on December 7, 2004 and again on February 7, 2008. The information was not verified by the measure developer. This NQMC summary was updated again by ECRI Institute on December 23, 2009. The information was verified by the measure developer on March 22, 2010.

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